

FARMER'S FRIENDS MAKING OF BOMBS

BIRDS WHICH AID IN DESTRUCTION OF VERMIN.

Occasional Instances Where Owls or Hawks Gain Appetite for Barn-Yard Fowls Should Not Condemn the Species.

That there is individual variation in animals is becoming much more commonly recognized than it used to be. President Roosevelt has called emphatic notice to this tendency to individual variation of habit among the wild things—the big game—that he has taken most interest in shooting. It is a variation which seems to be independent of circumstances, and to be determined by the character of the individual. A little reflection will show that it is far more reasonable to think that there would be some such variation than that there would not. We all recognize a difference of disposition in men and in women; we recognize a difference in character in our dogs, horses and other domestic animals. There is reason to think that in the natural state these differences would be apt to be greater rather than less; yet the writers of books on natural history and on sport, and those who have received in simple faith what they



THE OWL NO EVIL DOER.

have written, have been very prone to an over-hasty generalization, to argue from a single instance, or from too few instances, as to the general habits of a species, and on this inadequate evidence to convict or to condemn, as the case may be, the whole class.

This is a risk that is specially apt to happen with the animals that have recently, and with some difficulty, been rescued from the black list. The time has gone by, in the more enlightened places, when every hawk and every owl are shot down. That which used to be the rare exception has become the rule, and owl and hawk are spared. It is excellently well that it should be so. Not only are these two birds beautiful and harmless, but both species, generally speaking, are actively useful, doing much good to the farmer by eating insects and small rodents, and some little good to the game-preserver by the destruction of immature rats. But though this is the rule of these species, and their general habit, there are individual exceptions which are very apt to lead to a mischievous misjudgment if it be not clearly understood that such cases are the exceptional ones. Now and then an owl, forsaking the usual harmless and valuable habits of its kind, will sometimes form a personal habit, all its own, of visiting not only coops, but also dovecotes, and preying on any unprotected young thing which it may find not sufficiently far grown to protect itself. It is perhaps difficult to say whether a bird ever breaks a habit so formed, or whether the habit endures for a season only; but it seems more likely that such a habit, once formed, would become permanent. We may perhaps even say that there is a reasonable risk of its being transmitted, by example and by the taste for a delicacy once acquired, to the young of a bird thus individually differing from the type of its kind. There is virtually no doubt of the truth of the fact that these birds do learn to prey in this way on the young of other birds. The writer is not able to speak of his personal experience to its truth, but has been informed of its truth by those who have first-hand experience of it, and whose testimony is not to be doubted.

The great trouble is that the person who falls in with an exceptional case of the kind can hardly, by the most ardent persuasion, be convinced that it is really exceptional, and not the common habit of the species. Perhaps the best way to convince him would be to insist upon his making a note of the contents of the crop of every bird of the verminous kind which he kills. If this were done all over the country, we should very quickly have a great addition to our knowledge, and we should find local variations of habit probably much more important than we suppose.

Striking Horse Statistics.
Statistics submitted to Congress, in connection with the agricultural aggregate of horses January 1, 1906, stood at 18,718,578 against 14,361,667 at the corresponding date of 1897. Their total value increased from \$452,649,296 in 1897 to \$1,510,889,906. This startling rate of increase in value is no more marked than that of mules, according to the same government authorities. There were 2,215,654 mules in 1897 and 3,404,961 in 1906, and the values were respectively \$92,302,090 and \$334,680,529. If these figures are trustworthy there must have been some improvement in quality as well as noteworthy increase in numbers in the nine years, to account for all the difference.

GETTING TO BE A FINE ART WITH ANARCHISTS.

Followers of the Red Flag Gaining More and More Skill in Construction of Death-Dealing Missiles.

Bomb making is coming to be a fine art with a certain class of individuals whose ideas of reform begin and end in anarchy, and who expect to attain their ends by discriminate distribution of death-dealing missiles. The recent outrage in Madrid, when the attempt was made upon the lives of King Alfonso and his bride, has emphasized the fact that the bomb maker and the bomb thrower are still actively at work, and that the former is becoming more skilled in the making of his infernal machines. The bombs constructed years ago were not capable of wholesale destruction of life and property, but recently, in various countries, bombs have accidentally exploded in the hands of their makers and have created havoc over quite a wide area, in more than one instance wrecking whole floors of hotels or houses. Then, too, the number of persons who can be killed by a single bomb is now much greater than it was when these engines of destruction were first introduced. No less than 24 persons were killed by the explosion of the bomb aimed at King Alfonso and Queen Victoria a few days ago, and about 80 were more or less seriously injured.

A writer in a French paper a few days ago described some of the methods at present in use of manufacturing bombs and infernal machines. The number of explosives that can be used is remarkable. The easiest bomb to make, and, therefore, the one that has been most employed by terrorists, is set in operation merely by turning it upside down. This is generally made of a good-sized tin biscuit box, or any similar box. It is lined and padded with paper and more than half filled with a carefully prepared mixture of chlorate of potassium and ordinary sugar. Into this a small bottle of a certain acid is introduced, and the rest of the space in the box is filled with nails and scraps of metal.

The lid having been soldered on, the machine is ready for use. All the anarchist has to do is to place the box upside down at the place where he wants the explosion to occur and then to take to his heels. The acid quickly eats



BOMB MAKERS AT WORK IN THEIR LABORATORY.

through the cork of the bottle, mingling with the chlorate of potassium—and the bomb goes off with disastrous results to any hapless person or persons who may chance to be in the vicinity. The latest improvement in this class of bomb is to cover the box with a casing of cement, which by its resistance adds to the force of the explosion.

Percussion bombs and bombs with fuses are out of fashion, and are now only employed by anarchists very backward in the science of chemistry. There are bombs made of nitrates, chlorates, permanganates, peroxides, nitrocellulose, gun cotton, picrates, fulminates and many other explosives.

Turpin's picric acid is also a terrible agent in the hands of the terrorists. But these are far from being all of the weapons in the arsenal of the up-to-date bombmaker. In it we find, in addition to dynamite and nitrocellulose, smokeless powder (camphorated colloid), melenite and lyddite (picric acid liquefied), cresylite, ceresite, Favier's explosives, roborite (chloroantrobenzene), helioite (nitrobenzene and nitric acid), Brugere's powder, invented by the chief of the general staff of the French army; pyroxylated powder (gun cotton and nitrate), ballistite, cordite, dynamite gum (gun cotton and nitrocellulose), vicerite (nitrate sugar), and many other combinations.

Chemistry has produced almost innumerable explosives, and the anarchists and terrorists seem to have tried a large proportion of them. As for the elaborate manufacturing processes now employed for bombs, it may be mentioned that a missile thrown at a Russian governor a few weeks ago was found to be nickel-plated. The governor caught the bomb in his hand and it did not explode. A little while afterward another similar bomb was thrown at him. This one did explode, and badly injured him. Other bombs of polished steel have been found.

Chemists say that in the near future liquid air and liquid acetylene will be employed in the manufacture of bombs. It is even asserted that wireless telegraphy may be employed by the anarchists. It is said that a recent invention permits a bomb of liquid air being set off from a distance at any time chosen by the anarchists by means of a wireless current. This would render the discovery of the perpetrator of the crime practically impossible.

PRODUCTION OF LITHIUM.

Minerals of This Character Are Not in Great Demand in This Country.

A mistaken impression prevailed in this country for several years that there was a large demand for lithium minerals. The result was overproduction. In 1905, however, sharp retrenchment occurred, and the production fell to practically nothing. As reported by Mr. E. O. Hovey, special agent of the United States geological survey, it amounted to only 21 short tons, valued at \$252. All of it came from San Diego county, Cal. In 1904 the output of lithium minerals in the United States had amounted to 577 short tons, valued at \$5,155; in 1903 to 1,155 short tons, valued at \$23,425. There were no imports of lithium salts into the United States during 1905.

The mines of Pennington county, S. D., which formerly produced the greater part of the lithium ore consumed in the United States, were entirely idle during 1905. It is not likely that work on them will be resumed before the stocks of ore now on hand have been considerably depleted. Practically the only minerals which have been mined as ores of lithium have been amblygonite, lepidolite, and spodumene. Amblygonite has been found in commercial quantities only near Pala, San Diego county, Cal. This region is also the only one in the country where lepidolite, or lithia mica, is produced in commercial quantities. The spodumene mines are located in Pennington county, S. D.

The principal use of lithia ores is for the manufacture of the carbonate of lithium, which is utilized in the solid form and in solution for medicinal purposes, especially for the manufacture of so-called "lithia waters." Lithium salts are used also to a small extent in the manufacture of compounds for the production of colored fire. The metal tinges a flame with a beautiful shade of red.

IT WAS THE WRONG BABY.

Bibulous Husband Tries in Vain to Steal a March on Watchful Wife.

The clerk was smiling broadly and a caller asked him the cause of his jocularity, relates the Baltimore Herald.

"Why, it's a story a Missourian who is staying here just told me about a friend of his who is a well-known contractor here in Baltimore."

"Shall we have the story?" asked the caller.

"Sure," returned the other, "only we'll have to eliminate names. This contractor is sometimes given to brief sessions of bibulousness, and while returning from one of these a short time ago he made up his mind that he would not disturb his wife. On reaching home he was successful in finding the keyhole, and after careful effort he successfully navigated his way upstairs. Here he saw—or thought he saw—in the dim light which the electric lamp outside shed through the window the five-months' old baby sitting up in the rocker, while his wife was comfortably sleeping in the bed beyond. Softly creeping over to the rocker he took the baby in his arms and began to rock her to sleep, when his wife awakened.

"John," she said, "what are you doing there?"

"Sh!," he said, "I'm rocking baby to sleep."

"Baby's been asleep for over an hour," said the patient wife, reproachfully. "John, put down that doll and come to bed. I rather think you need a little sleep."

Effort to Save Elephants.

Travelers from Africa are urging the governments of Europe to take steps to preserve the elephants in their respective colonies and spheres of influence. In India the government controls the forests and the laws are strict. When elephants are dangerous, permits are issued for hunting the "vagrants" or bad elephants, and when they are killed all permits are revoked. In Siam all elephants belong to the crown, and are never killed. Every five years there is a government inspection of them, all white elephants are sent to the prince royal, and the domestic stock is increased by careful selection from the general herd. The elephant there is appreciated as a laborer and a domestic servant; but in Africa thousands are killed every year for their ivory, which is whiter, harder and more esteemed than that of the Asiatic elephant.

Woman's Progress in China.

Chinese women are being emancipated. Schools for the daughters of man have been opened, and some Chinese girls are even attending courses at the University of Tokyo. Periodicals for women are issued in some of the larger cities, and a book has been published which is devoted entirely to a plea that girls should be allowed to select their own husbands. The empress encourages this movement. She has endowed a school for the families of high officials, and has given orders that the practice of foot-binding must be given up.

Germany's Patent Office.

The German patent office comes in for much censure. One would suppose such an institution to exact no more of inventors than is needed to pay current expenses, but in reality the charges are so high that the state pockets half the income as profit. It is pointed out that for poor inventors matters are almost as bad as they were when Gutenberg, after inventing the art of printing, lived in poverty, and finally had to pawn his apparatus.

MATCHES NOT REQUIRED.

How an Oregon Forest Fire Was Started by the Wrath of a Hunter.

"How did this terrible forest fire get started?" inquired the tenderfoot from Indiana, according to the Portland Oregonian.

"Well, you see," said the obliging Oregon man, "last week me an' Si Hanks wuz up in the mountains on a huntin' trip and Si wuz 'bout seven miles from camp an' wanted to light his pipe."

"Oh, I see—and he threw down the lighted match and set the woods afire."

"No, you don't see. Jest lemme tell my story. Si wanted to light his pipe. He had put a bunch of matches in his pocket the night before in the dark. Si kep' a-congratulating himself on havin' a plenty of matches, an' he waited till he could set down an' smoke an' crink in the inspirin' scenery. Si wuz just as eager for that smoke as a tomcat is for his dinner when he sees a bowl o' cream with the liver off. Finally Si seen a big rock, the finest rock for a seat in the hull state of Oregon, and the finest piece o' scenery on Puget sound to Mexico. Si set down, pulled out his old pipe, an' filled it full o' the best tobacco that grows. Then he reached in his pocket for a match and fetched out a wooden toothpick. He dove in again an' fetched out another. Then he pulled out the hull bunch o' matches an' found they wuz nothin' but toothpicks—an' seven miles to camp. An' then Si Hanks set the forest afire."

"I don't see how he could do that if he had no matches," said the dubious tenderfoot.

"Ye don't, huh?"

"I certainly don't."

"Well, Si Hanks jest naturally set them woods afire with the lightning of his wrath."

PLANTS OF ARID REGIONS.

Tender Growths That Survive Long Periods of Severe Drought.

Even the deserts have their botany, as the desert botanical laboratory at Tucson, Ariz., is witness. The water relations of the plants of arid regions so delicately are adjusted that a slight variation in the available supply or in the relative humidity of the air produces a quick and notable effect. A shrub called the ocotillo had been without leaves for several weeks, owing to a long period of drought. One day three gallons of water were poured slowly in the ground at the base of the plant; next day leaf buds were observed, which by the afternoon of the next day had become an inch long, and four days afterward were full grown. The period of activity of plants depends on the period during which they retain their leaves. In the case of desert plants growing under adverse condition to the large amount of moisture present in the air, which retards transpiration and thus assists the plant in reserving to some extent the amount of water at its disposal, it is considered probable that the leaves absorb atmospheric moisture in sufficient quantity to be of biological importance. It has been proved that stems of ocotillo absorb both water and atmospheric moisture; it also has been shown that a branch of ocotillo without leaves can absorb a sufficient amount of water to induce the formation of leaves.

PICTURES SENT BY WIRE.

Apparatus by Which Photographs or Sketches Are Transmitted.

Picture telegrams have been wired from Nuremberg to Munich, 100 miles away, and apparently could have been sent ten times that distance with equal ease. In Prof. Korn's apparatus the sketch or photograph must be translucent, and is attached to a cylinder of glass mounted on an axis by which it is slowly rotated, moving at the same time from right to left—in fact, moving much as the wax cylinder in the phonograph does. A beam of light is directed on the cylinder and passing through it, modified by the image on that particular cell with in the cylinder. This cell forms part of an electric circuit. The resistance of a selenium cell varies according to the light falling upon it, and in this way the current flowing in the circuit of which the line forms a part is modified. The receiving apparatus consists of a similar cylinder revolving synchronously with the first with photographic paper fastened outside it, and with a Nernst electric lamp occupying the place of the selenium cell. The light of the lamp fluctuates in unison with the light falling on the selenium, and so affects the paper and reproduces on it the image on the first cylinder.

Island Mystery.

"Treasure island" is still a mystery. The steam yacht Rose Marine, which left England in October, 1903, to search for the treasure which tradition says was concealed on Cocos island, in the Pacific, has returned to Southampton. Capt. Mathews, the skipper, is reluctant as to the results of the voyage, and only says that his belief in the project has been strengthened. The work of searching the island is very difficult.

Hollow Lead Soldiers.

By a secret method a London firm is able to make hollow lead soldiers. This greatly reduces the cost of production, and the trade in these toys, which once belonged almost exclusively to Germany, is now rapidly increasing in England. The weight of the hollow soldier is one-third of the solid.

SHOCKING STATEMENT, BUT SHE FAILED TO DISPROVE.

Miss De Pink (trying to get the conversation into a pleasant groove)—I was so shocked while reading Max O'Rell's book to-day. He says in America the girls do the proposing. Isn't it contemptible in him to print such a slander? Mercy! Why, any self-respecting American girl would die before she'd let a man know she loved him. The idea of our girls proposing!

Mr. Bashful—Don't they?

"Of course not."

"I—I'm very sorry, because I never, never could pluck up courage to propose to a girl. I feel very blue to think a girl would rather die than—than let me know she wanted to marry me. I—I guess I'll go home. Good-by."

"Oh! Oh! Oh! Don't go. I—I love you. Mercy! I nearly lost you. Sit down on this sofa, my darling."—N. Y. Weekly.

A Difference.

Bacon—Marriage does make a difference, after all.

Eschert—How so?

"Before a man marries, when he hears his sweetheart say: 'Oo's 'dvy duty is oot' he thinks she's all to the good."

"Of course."

"But after marriage, when he hears the same girl make the same remark to the baby, he calls it 'tommyrot,' you know."—Yonkers Statesman.

Rare Treat.

"Some great physician tells us," said the woman in the green waist, "that eating beef puts a person in a bad humor. Does it put your husband in a bad humor?"

"I should say not," sighed the little woman with the typewriter ink on her fingers. "My husband is a poet, and he is so tickled when we can afford real beef that he is in a good humor for a whole week."—Chicago Daily News.

Stuck.

Cogger—Up to the hubs, eh, and have telephoned for a team of mules to pull you out?

Motorman—Yes. If I ever get this auto out I shall offer it to the harbor dredgers.

Cogger—What in the world use would it be to them?

Motorman—Why, it is such a perfect mud machine!—Chicago Daily News.

Legal Advice.

Mrs. De Temper—I am not happy with my husband. Shall I drive him away?

Lawyer—His life is insured in your favor, isn't it?

"Yes, I made him do that before we married."

"Well, don't drive him off. He'll die quicker where he is."—N. Y. Weekly.

How Silly!

"Madam," said Fatigue Phil, raising his tattered hat with a courtly grace, "I don't ask for money, nor food, but could you gimme an old coat—just a real old coat, ma'am?"

"Why, answered Mrs. Young, "isn't your old coat old enough?"—Cleveland Leader.

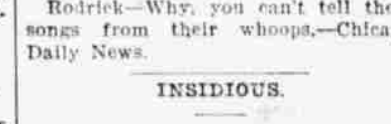
Both Barbarous.

Rodrick—There is something about the Indians that reminds me of college students.

Van Albert—What is it?

Rodrick—Why, you can't tell their songs from their whoops.—Chicago Daily News.

INSIDIOUS.



Dr. Insuim—Congratulations me. My practice is increasing so that I really can't attend to it.

Miss Quizer—How nice! I congratulate both yourself and patients.—Chicago Daily News.

One Kind of Reform.

Stern retribution 1 degree

For others' faults. So he it known I think I'm privileged to be

A little lenient with my own.

—Washington Star.

The Young Thing.

Mr. Justwad—What do you mean?

The Butcher—No offense, sir. The lady was marketing at my place yesterday, and she wanted me to let her have a nice tender omelette.—Cleveland Leader.

The Extension of Knowledge.

Knicker—Is Jones a philanthropist?

Bocker—Yes; he has endowed a library of books at the racetrack.—N. Y. Sun.

She—Don't you want to read Nature's book?

He—What does it expose?—N. Y. Sun.

A Surprise.

"Dye know, I have sometimes thought—"

"How interesting! And why did you give it up?"—Cleveland Leader.

IT WAS RIGHT IN HER POP'S LINE.

Bill—Thought you were in love with that Budd girl?

Jill—So I was. She is the only girl who ever kindled the fires of love in my heart.

"What happened?"

"Why, her father happened. He put out the fires. You know he's always looking out for business."

"What do you mean?"

"Why, her father is in the fire-extinguisher business."—Yonkers Statesman.

The Board of Health.

A countryman walking along the streets found his progress stopped by a barricade of wood.

"What's this for?" said he to a person standing by.

"Oh, that's to stop the fever from spreading," replied the other, by way of being jocose.

"Ah," said the countryman, "I've often heard of the board of health, but I never saw it afore."—Tit-Bits.

TOO LONG A TASK.



Office Boy—Want to see the gov'nor? What name shall I say?

Visitor—Herr Schweitzsalburghausen.

Office Boy—Oh, I shan't be able to pronounce all that. I'm leaving at the end of the week.—Punch.

"Small Ad" Joke.

The honeymoon had just finished when he meandered home at two a. m.

"I suppose," he remarked to his better half, "you will class me as a brute?"

"Oh, no," she answered, calmly. "You are too late to classify."—Chicago Daily News.

A Big Cast.

This world is a stage. You will note that the list

Of players cannot be called small. A few may take encores; some others are hissed.

And a lot aren't noticed at all!—Washington Star.

Her Other Thought.

She (indignantly)—I don't think you give us girls credit for thinking of anything else than dress.

He (naively)—Oh, you wrong me. I do give you credit for thinking of more than dresses.

She—Of what else?

He—Bonnets.—Tit-Bits.

Deserved the Fate.

Naggus—What are you going to do with the hero and heroine of that magazine story you're running now? Marry them?

Borus—Certainly. They'll be married in the last chapter.

Naggus—I'm glad of it. It will serve them right.—Tit-Bits.

Consideration.

"Why is a girl always supposed to give a side glance and look down when she is being proposed to?" said the young man with romantic tendencies.

"Probably," answered Miss Cayenne, "she does that to avoid looking the man in the face for fear of laughing."—Washington Star.

Reassuring.

Motorist's Friend—Oh, I say! Goodness gracious, we'll be smashed up in a minute!

Motorist—All right, my dear fellow, don't excite yourself. The firm I bought this motor from have agreed to keep it in repair for a year.—Tit-Bits.

Badly.

"Is that young man gone?" called her pa. (It is late—her beau waits for his car.)

"Is he gone?" says the maiden, "Gee whiz! I should say he is!"—Cleveland Leader.

The Woman of It.

"Do you begin to feel at home in your new house, Mrs. Smithkins?"

"Oh, dear, no," replied Mrs. Smithkins. "It almost worries me to death."

"Why so, dear?"

"I can't find anything the matter with it."—Milwaukee Sentinel.

Matter of Expense.

"George," murmured the young wife, "am I as dear to you now as I was before we married?"

"I can't exactly tell," replied the husband, absent-mindedly: "I didn't keep any account of my expenses then."—Tit-Bits.

His Chance.

"I never would marry a doctor," said the grass widow who had kept him in a corner for over an hour.

"Where are you going?"

"To study medicine," he replied with a sigh of relief.—Judge.

His Species.

"So Dick is the flower of the family, is he?"

"Um, yes; the wild flower."—Detroit Free Press.

A Surprise.